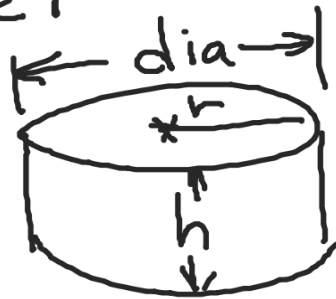


Volume $V = \pi r^2 h$
Cylinder



diameter

$$r = \frac{\text{dia}}{2}$$

1) hypothesis
which has the greatest
density to the least

QUARTER

NICKEL

DISC

SPHERE

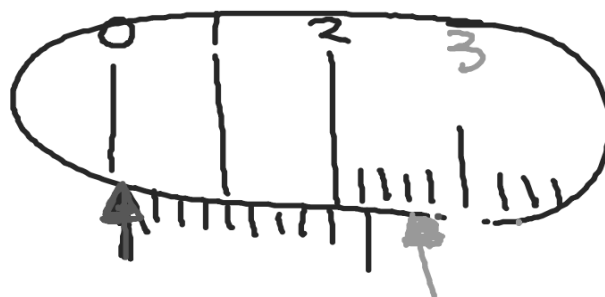
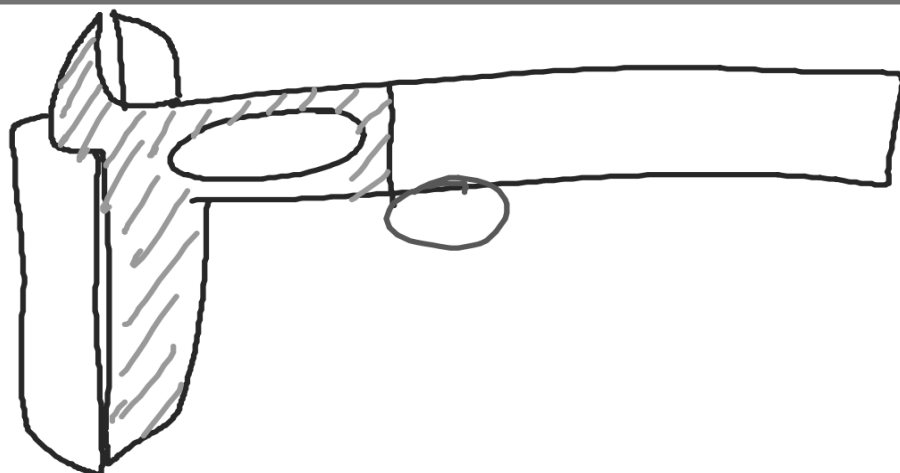
1 greatest density

2 next

3 next

4 least dense

ITEM	DIA (cm)	height (cm)	Volume (cm ³)	mass (g)	Density (g/cm ³)
DISK	d = 2.7	.7	4.01		
	r = 1.35				
Sphere	d = 1.7	—	2.57		
	r = .85				
Nickel	d = 2.1	.2	.69		
	r = 1.05				
QUARTER	d = 2.6	.2	1.06		
	r = 1.3				



VOLUME $V = \pi r^2 h$
cylinder

QUARTER $V = \pi (1.3 \text{ cm})^2 (.2 \text{ cm})$
 $= 1.06 \text{ cm}^3$

VOLUME
Sphere $V = \frac{4}{3} \pi r^3$
 $(.85 \text{ cm})^3$
 $= 2.57 \text{ cm}^3$

